

B60Q

ARRANGEMENT OF SIGNALLING OR LIGHTING DEVICES, THE MOUNTING OR SUPPORTING THEREOF OR CIRCUITS THEREFOR, FOR VEHICLES IN GENERAL

Definition statement

This place covers:

The arrangement of lighting or signalling devices with relationship to the vehicle or to each other.

The mounting or supporting of lighting and signalling devices on the vehicle.

The circuits therefor.

The switches therefor.

The control and signal-initiating means therefor.

The monitoring therefor.

The devices mentioned being:

- for illuminating areas inside or outside a vehicle or for giving signals to the outside of the vehicle or to the vehicle occupants; and
- mounted to the vehicle in a fixed or adjustable manner or supported by the vehicle with the provision of being portable.

Relationships with other classification places

Subclass [B60Q](#) covers arrangements of lighting and signalling devices as a whole, i.e. as a complete unit dedicated to a given lighting or signalling function.

The relative arrangement of devices dedicated to different lighting or signalling functions within a single housing is also covered by [B60Q](#).

Optical components (e.g. lenses, light sources) constituting of the lighting and signalling device itself are classified in other relevant classes and subclasses.

Arrangements of these optical components in relation to each other in order to generate a specific optical beam are covered by [F21S 48/00](#).

Subclass [B60Q](#) covers arrangements of lighting and signalling devices mounted on vehicles in general, but not the arrangements of lighting and signalling devices specifically adapted to particular types of vehicles other than cars, trucks and buses; these are classified in the relevant subclasses for other types of vehicles. An exception to this are the arrangements of lighting and signalling devices specifically adapted to motorcycles which are classified in both subclasses [B60Q](#) and [B62J](#).

Circuits for lighting and signalling devices that may have an application other than in a vehicle are also classified in [H05B](#).

Subclass [B60Q](#) covers the mechanical arrangement of switches only if they apply to vehicle lighting and signalling. However [B60Q](#) covers the mechanical arrangement of all steering column stalk switches. Switches that may have an application other than in a vehicle are also classified in [H01H](#).

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Arrangements of cameras in vehicles	B60R 1/00
Vehicle electric circuits in general	B60R 16/00
Arrangement of lighting devices for rail vehicles	B61D 29/00
Arrangement of signalling and lighting devices for bicycles	B62J 6/00
Arrangement of signalling and lighting devices for ships	B63B 45/00
Arrangement of signalling and lighting devices for aircrafts	B64D 47/02
Mounting means	F16B
Lighting or signalling devices per se	F21S , F21V
Inter-vehicle communication for warning purposes	G08G 1/00
Illumination of logos, symbols, advertisement	G09F
Electric switches per se	H01H
Electric lighting not otherwise provided for	H05B

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

LED	Light Emitting Diode
-----	----------------------

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

DRL	Daytime Running Light
-----	-----------------------

B60Q 1/00

Arrangements or adaptations of optical signalling or lighting devices (for lighting vehicle interior [B60Q 3/00](#); {circuit arrangements for electric light sources in general [H05B 37/00](#)})

Definition statement

This place covers:

The arrangement or adaptation of non-portable devices on vehicles dedicated to:

- illuminate areas outside of a vehicle in visible and non-visible wavelength range;
- give optical signals to the outside of the vehicle.

The mounting thereof, also for adjustable devices.

The circuits thereof.

The switches thereof.

The manual or automatic control and signal-initiating means thereof.

Further details of subgroups[B60Q 1/007](#)

This subgroup covers only devices in which the cap has no mechanical link (no holding function) with the bulb. If the cap serves to hold the bulb, it is only classified in [F21S 48/1109](#) or [F21S 48/211](#) and subgroups.

[B60Q 1/0088](#)

This subgroup covers only connections to the vehicle power supply or connections of several lamp units with each other.

[B60Q 1/0408](#)

Arrangements on headlights for positioning or indexing other vehicle parts (e.g. bumper cover or wing) are classified here and in the field relating to the other parts, e.g. [B62D 25/00](#), [B60R 19/00](#).

[B60Q 1/0425](#)

This subgroup covers arrangements in which the headlight can be entirely swivelled around an axis (for instance to change the bulb). Small swivelling for adjustment purposes [B60Q 1/045](#), [B60Q 1/068](#).

[B60Q 1/076](#), [B60Q 1/115](#), [B60Q 1/122](#)

Details of headlight adjustment by electric actuating means, e.g. motors, shafts, ball-joints, are classified in [B60Q 1/076](#) even for automatic systems because [B60Q 1/115](#), [B60Q 1/122](#) are intended for the control systems only excluding this general features.

[B60Q 1/08](#) and its subgroups, [B60Q 1/1423](#), [B60Q 1/143](#)

Documents in these subgroups are also classified in [B60Q 2300/00](#) according to the parameters used for the automatic adjustment or switching. However, classification in [B60Q 2300/00](#) is only done for parameters whose contribution in the automatic process is clearly shown. Statements such as that "parameter x could be used for the adjustment" or "parameter x is measured by a sensor and fed into the control unit" without further details are not sufficient for classification in [B60Q 2300/00](#). [B60Q 2300/00](#) is not used for other subgroups than [B60Q 1/08](#) and its subgroups, [B60Q 1/1423](#), [B60Q 1/143](#).

[B60Q 1/12](#), [B60Q 1/18](#)

Devices in which automatic cornering is done by an additional, separate headlamp are classified in [B60Q 1/12](#) and [B60Q 1/18](#).

[B60Q 1/2665](#)

If of interest classification is also given in [B60R 1/1207](#).

[B60Q 1/2673](#)

Although portable and not mounted on vehicles, lighting and signalling devices worn by a (motorcycle) driver or passenger are classified here, but only when the device repeats or replaces a lighting or signalling function of the vehicle.

References**Limiting references**

This place does not cover:

Arrangement of lighting devices for vehicle interior, the mounting or supporting thereof or circuits therefor	B60Q 3/00
---	---------------------------

Assembling headlights on an assembly line	B62D 65/16
Calibration of headlight	G01M 11/06
Control circuits of light sources for camera capture	H05B 41/30

Informative references

Attention is drawn to the following places, which may be of interest for search:

Horn switches integrated in steering wheel covers with tear lines	B60R 21/21658
Gear selector levers	F16H 59/02

B60Q 3/00

Arrangement of lighting devices for vehicle interiors; Lighting devices specially adapted for vehicle interiors

Definition statement

This place covers:

The arrangement or adaptation of devices on vehicles dedicated to illuminate in visible and non-visible wavelength range areas for parts located inside a vehicle.

The mounting therefor, also for adjustable devices.

The circuits therefor.

The switches specifically adapted therefor.

The manual or automatic control means therefor.

Illumination aspects of signal or indicator lamps and buttons.

Further details of subgroups

[B60Q 3/62](#), [B60Q 3/64](#), [B60Q 3/66](#), [B60Q 3/68](#), [B60Q 3/85](#), [B60Q 3/88](#) These subgroups apply to all lighting devices of [B60Q 3/00](#).

[B60Q 3/51](#)

This subgroup covers the mounting of a lighting device as a whole. Mounting of the lamp components, e.g. lens in relationship with housing, it is classified according to the lamp type (portable, retractable, room lamp, reading lamp, strip light, etc.).

[B60Q 3/57](#)

This subgroup does not cover devices where only a piece, e.g. the lens, is retractable.

[B60Q 3/59](#)

This subgroup covers lighting devices intended to be normally attached to the vehicle, with provision of being portable. Portable lamps that can be plugged into a vehicle socket are classified in [F21L](#) and [B60Q 3/88](#), not in [B60Q 3/59](#).

[B60Q 3/72](#)

This subgroup covers lighting devices specifically designed for the purpose of anti-dazzling, e.g. by adjusting the light intensity falling on the driver's eyes according to the light level in front of the vehicle.

A reading lamp with a blend to prevent that the conductor is dazzled by the lamp is not classified here but in the specific lighting subgroup of class [F21](#).

Relationships with other classification places

Arrangements or adaptations of lighting devices for the interior of aircrafts ([B64D](#)) and rail vehicles ([B61D](#)) are classified also in [B60Q 3/00](#), because they are similar to arrangements in buses.

Lighting devices for individual instruments are classified in [G01D](#), but lighting devices for several instruments, e.g. lighting of a panel of instruments or light guide arrangements between several instruments, are classified in [B60Q 3/10](#) and subgroups.

Signal or indicator lamps and buttons are classified in [B60Q 3/10](#) for the general illumination aspect only; the application and control aspects are classified in the application group, e.g. the control of an indicator lamp for the air-conditioning should only be classified in [B60H](#).

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Lighting devices for door or window locks	E05B 15/08 , E05B 17/10
Portable lighting devices in general	F21L
Lighting devices for individual instruments, e.g. speedometers	G01D 11/28 , G01D 13/265 , G01D 13/28
Back-lighting of LCD screens	G02F 1/00
Illumination of logos, symbols, advertisement	G09F 13/00

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

LED	Light Emitting Diode
-----	----------------------

B60Q 5/00

Arrangements or adaptations of acoustic signal devices {(sound producing devices in general [G10K](#))}

Definition statement

This place covers:

The arrangement or adaptation of acoustic devices for providing signals to the outside of the vehicle.

Vehicle horns to repel animals

The mounting thereof.

The circuits therefor.

The switches therefor.

Relationships with other classification places

Arrangements or adaptations of acoustic devices for providing signals to the inside of the vehicle, e.g. to the driver, are classified in [B60Q 9/00](#).

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Acoustic devices to repel animals in general	A01M 29/00
Horn switches integrated in steering wheel covers with tear lines	B60R 21/21658
Sound producing devices per se, producing sound not determined by the supply frequency	G10K
Sound producing devices per se, e.g. loudspeakers or like acoustic electromechanical transducers	H04R

B60Q 7/00

Arrangement or adaptation of portable emergency signal devices on vehicles

Definition statement

This place covers:

The arrangement or adaptation of portable emergency signal devices on vehicles, whereby the device is:

- stored in the vehicle when not in use, and
- placed remote from the vehicle, or on extending parts or overhanging loads of the vehicle when in use.

Relationships with other classification places

The arrangement or adaptation of portable or non-portable emergency signal devices placed on vehicles when in use is classified in [B60Q 1/52](#).

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Arrangements for enforcing caution on roads, e.g. marker posts or traffic signals	E01F 9/00
Signs in general	G09F
Reflecting warning triangles	G09F 13/16

B60Q 9/00

Arrangements or adaptations of signal devices not provided for in one of the preceding main groups, {e.g. haptic signalling}

Definition statement

This place covers:

The arrangement or adaptation of devices for providing signals, e.g. acoustic, optical or haptic signals, to the driver or the passengers of the vehicle, whereby the signal is not related to a particular vehicle function or parameter.

Specific signalling devices for anti-collision purposes.

Specific signalling devices for parking purposes.

Specific signalling devices to prevent vehicle battery discharge.

Relationships with other classification places

The subject-matter to be classified in this main group are devices that produce specific, elaborated signals.

For instance, a device for analysing a traffic environment to assess potential collision situations that merely generates an optical or acoustic signal to the driver when a potential collision situation is assessed is not classified in [B60Q 9/00](#), but only in the group corresponding to traffic control for anti-collision purposes: [G08G 1/16](#). If the device generates a signal that varies according to the situation, it is classified in [B60Q](#).

Signalling devices to the driver related to a particular vehicle function, e.g. start of automatic braking, or to a vehicle parameter, e.g. reaching a particular speed, are not classified in [B60Q 9/00](#), but only in the corresponding vehicle function group of class [B60](#).

References

Limiting references

This place does not cover:

Instruction means for parking or steering aid	B62D 15/027 , B62D 15/029
---	--

Informative references

Attention is drawn to the following places, which may be of interest for search:

Means for informing the driver, warning the driver or prompting driver intervention in vehicle conjoint control systems	B60W 50/14
Anti-collision systems	G08G 1/16

B60Q 11/00

Arrangements of monitoring devices for devices provided for in groups [B60Q 1/00](#) - [B60Q 9/00](#) {(testing of electric installations on road vehicle [G01R 31/00](#))}

References

Limiting references

This place does not cover:

Testing of alignment of vehicle headlights at manufacture	G01M 11/06
Testing of electric installations on road vehicle	G01R 31/006

Informative references

Attention is drawn to the following places, which may be of interest for search:

Detecting lamp failure in a circuit in general	H05B 33/00 - H05B 43/00
--	---